Central Management Software

For use with HAI 68A00-1 Network Digital Recorder

Document Number 68R00-1 Rev. A

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1. Introduction

1.1. CMS (Central Management Software)

CMS is total management network software that is compatible with the 68A00-1 Network Digital Recorder. It consists of a Mode View window, Main View window, and History View window. CMS doesn't have Graphic User Interface in each panel; therefore, CMS gives you the flexibility to adjust the size and display structure of each panel.

CMS has the following features for efficient central management.

1.2. Main Features

Panel Configuration

CMS doesn't have Graphic User Interface so that each panel can be adjusted in size and display view. This type of configuration allows various display configurations by allowing you to easily move each video panel.

Multi-Monitoring and Screen

Multi-monitors are supported up to the limit that the CMS server can support. Therefore you can configure Tree, Live, File, and Event panels in various display modes, according to your liking.

Simultaneous Multi-Monitoring

LiveView has up to 16 monitoring panels. The normal computer system recommendations is P4 3.0GHz (CPU), 2GB (RAM).

Simultaneous Local & Remote File Search and Playback

CMS can record the live images in local memory and may also access the video server's storage remotely. This feature is run on the same FileView panel.

Event Capture

Event data is shown to you in text or thumbnail mode. Double-click on either the text data or thumbnail image to start playback automatically from the time of event occurring in the FileView panel.

Multi-Group Configuration

CMS supports multiple groups with main and sub configurations; this allows you to easily look at all the configurations in the tree structure using one view.

Event Log Information

It shows event/application history information in the history view window. The information is also stored as a file.

Easy Remote PTZ Control

The Remote PTZ control panel is movable and easy to use.

Pop-up Menu Using a Mouse

The Main menu is invoked by a right-click on a mouse.

1.3. CMS Specifications

Contents		Detail Information
Server PC Requirements	CPU	Pentium 4 3.0GHz or higher
	Memory	2GB or higher
	No. of LiveView	1
	OS	Windows 2000 or higher
	Video Card	ATI Radeon 7000 Series (PCI Type) 128M or higher, Direct-X included
CMS	Post time In the event recording	- 2 Min. from the time of event - 2 Min. extended from the time of event in case of consistent events
	Recording mode	Motion / Sensor / Continuous
	Recording schedule	- Weekly, daily schedule in each channel - Overwriting function as to adjustable recording rate and disk space - Alias search
	Max. Live channel	16 channel (Simultaneous)
	Max. VOD channel	16 channel (Simultaneous)
	Max. recording rate	CIF 5 Frame per channel (5 * 64 CH / sec)
	CMS setup	- 4 MRX connection (64 CH) - Decoding : 4 frame (Recording & Restreaming)
Server PC Recording Requirements	System HDD (1st HDD)	- Minimum size is 200GB - Only OS and CMS should be installed on system HDD - No divided partition (Only one physical partition) - Enough free size is necessary to have virtual memory allocation for saving system/event log and jpg
	Initial system loading	CPU : about 40%, Memory : about 1.07GB
	CPU & Main board	Dual CPU / Dual core CPU

1.4. Surveillance Configuration Utilities and Manuals (68A07-1)

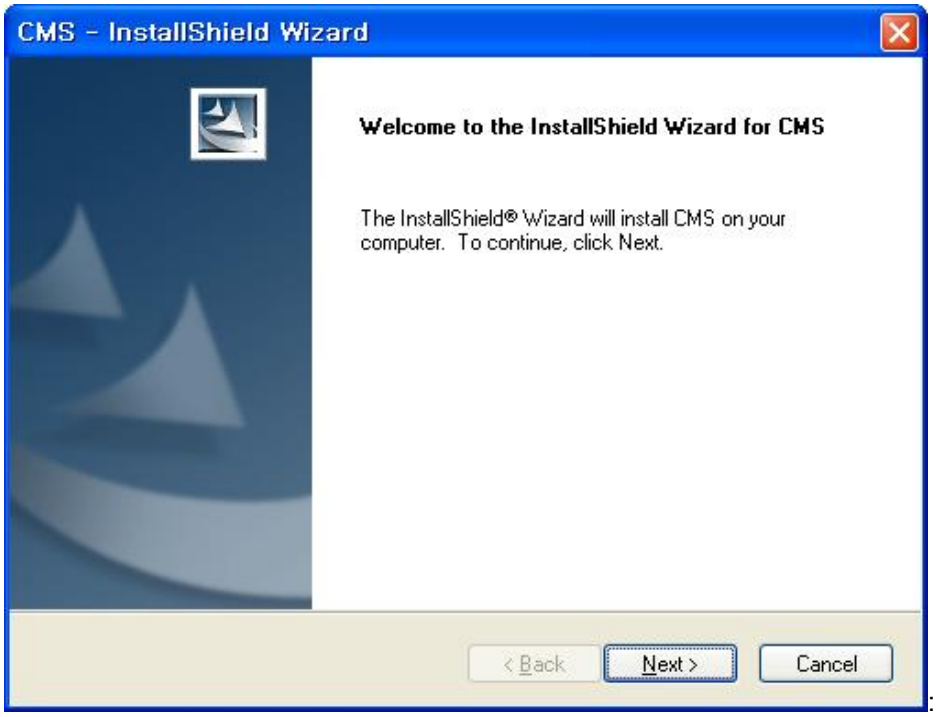
Including CMS Installer, IP Setup Wizard, and User Manuals

1.5. Installation

You should follow the below procedures for CMS system installation.

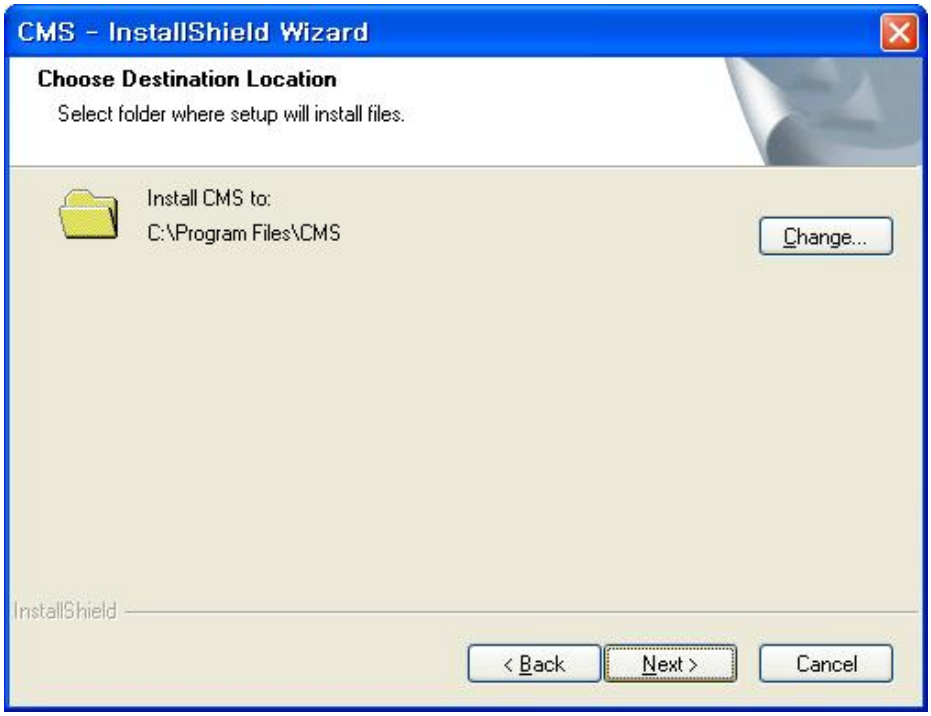
- Double-click CMS Installer

- Click the “Next” button.

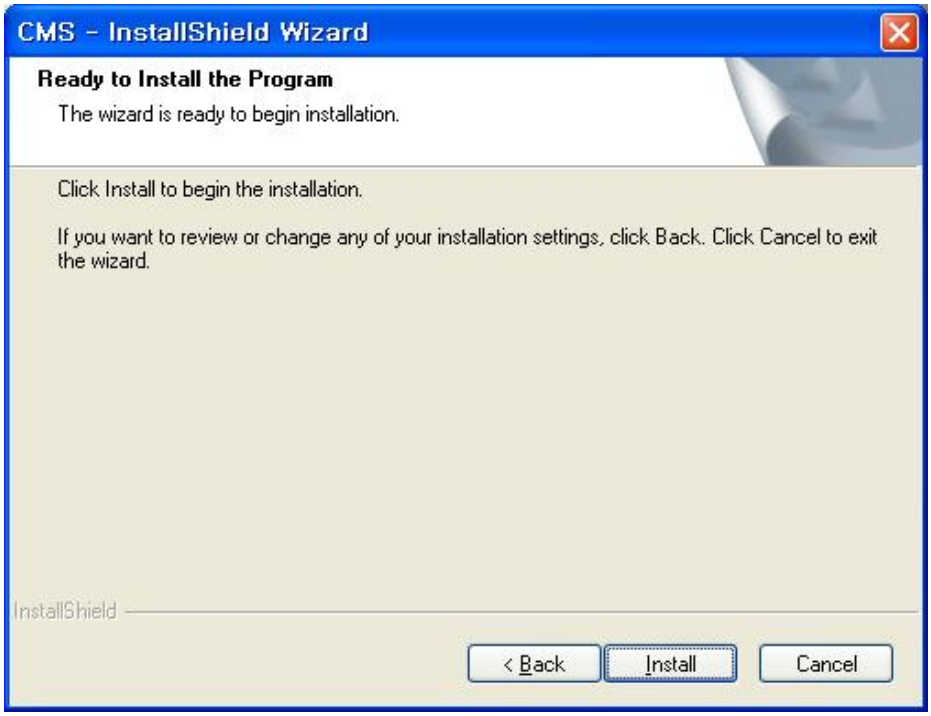

CMS - InstallShield Wizard
Welcome to the InstallShield Wizard for CMS
The InstallShield® Wizard will install CMS on your computer. To continue, click Next.
< Back
Next >
Cancel

:

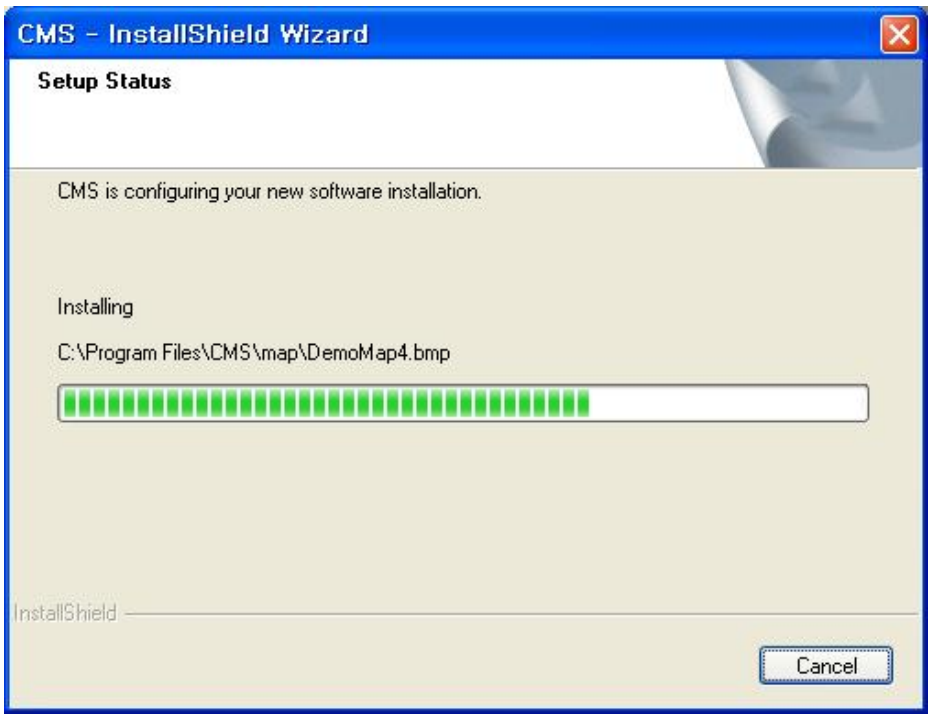
- Click the “Next” button.



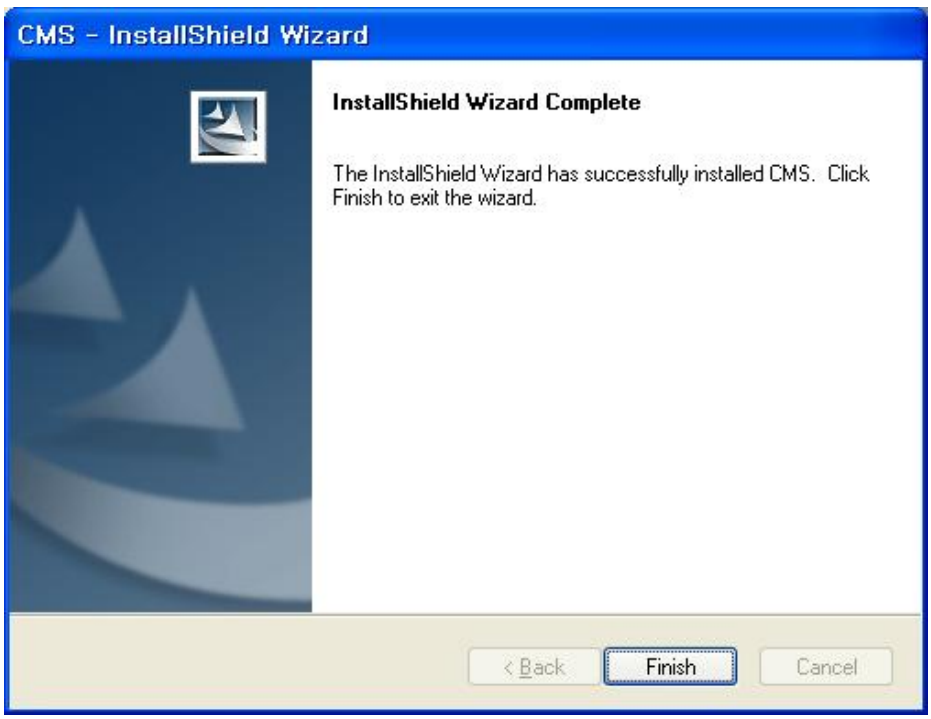
- Click the “Install” button.


CMS - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

- Installing CMS



- Click the “Finish” button.


CMS - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed CMS. Click Finish to exit the wizard.
< Back
Finish
Cancel

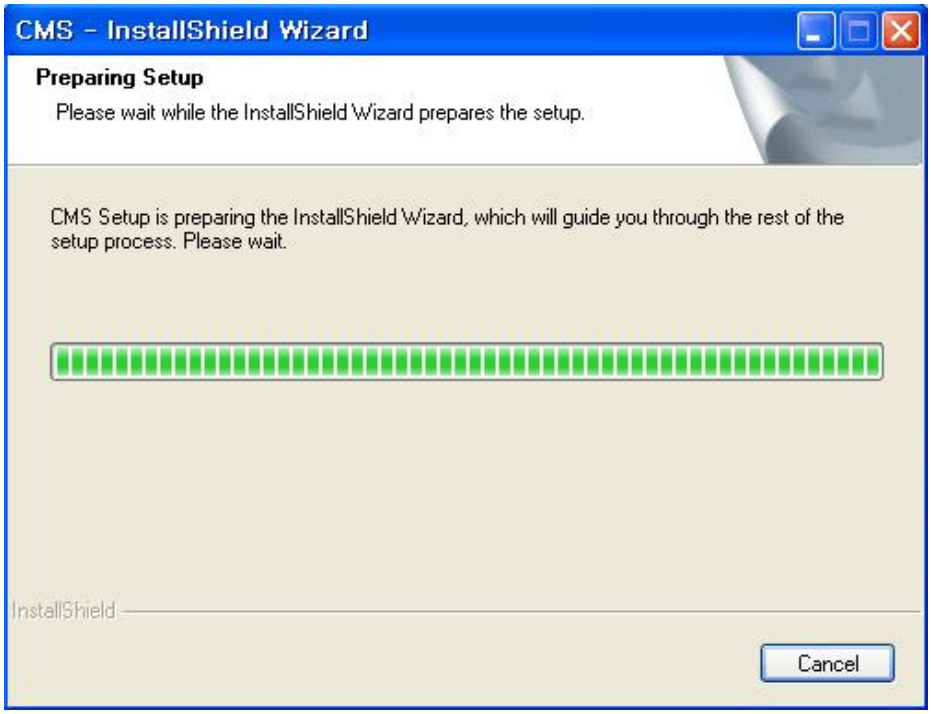
1.6. Uninstalling

To uninstall CMS, you have to follow the below procedures using the CMS installer or Add or Remove Programs in Windows Control Panel.

[CMS installer]

- Double-click CMS Installer

- Uninstalling CMS

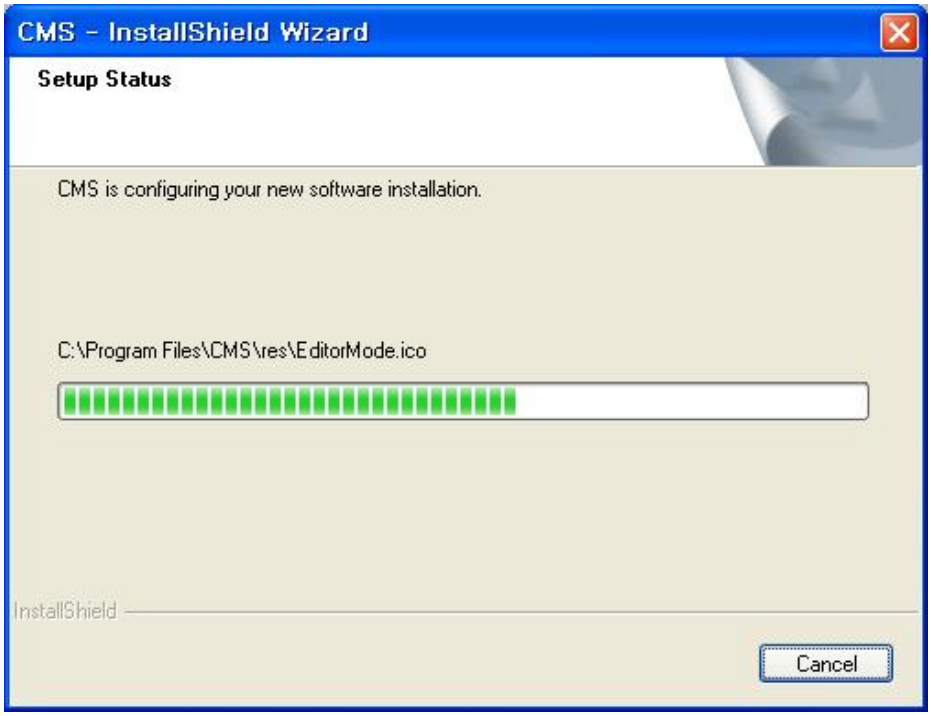

CMS - InstallShield Wizard
Preparing Setup
Please wait while the InstallShield Wizard prepares the setup.
CMS Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.
InstallShield
Cancel

- Select the “Remove” button and then click the “Next” button.

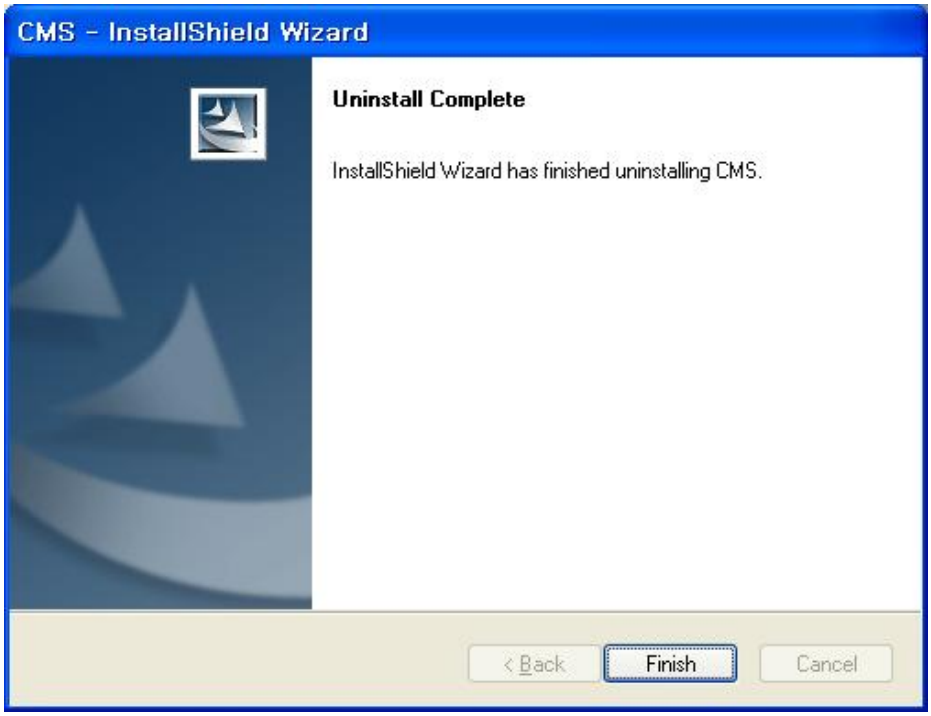
CMS - InstallShield Wizard
Welcome
Modify, repair, or remove the program.
Welcome to the CMS Setup Maintenance program. This program lets you modify the current installation. Click one of the options below.
Modify
Select new program features to add or select currently installed features to remove.
Repair
Reinstall all program features installed by the previous setup.
Remove
Remove all installed features.
InstallShield
< Back
Next >
Cancel

- Click the “Yes” button to confirm.

- Removing CMS

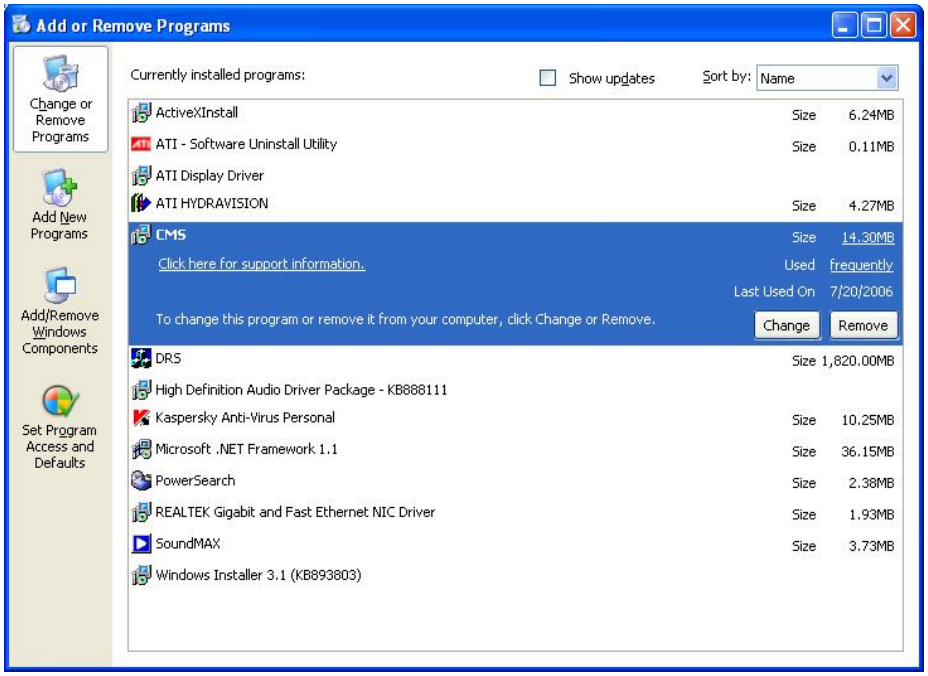


- Click the “Finish” button.

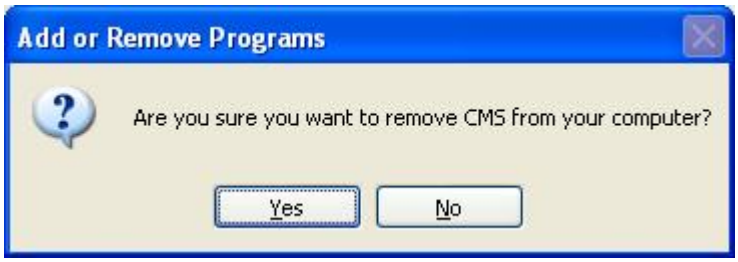


[Add or Remove Programs in Windows]

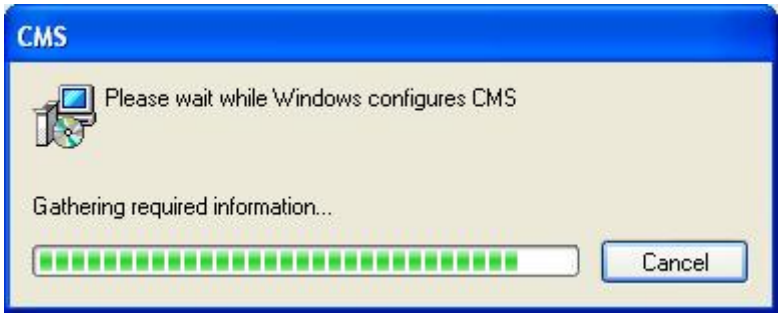
- Go to “Add or Remove Programs” in Windows Control Panel.
  Select the CMS program and click the “Remove” button.


Add or Remove Programs
Change or Remove Programs
Add New Programs
Add/Remove Windows Components
Set Program Access and Defaults
Currently installed programs:
Show updates
Sort by: Name
ActiveXInstall Size 6.24MB
ATI - Software Uninstall Utility Size 0.11MB
ATI Display Driver
ATI HYDRAVISION Size 4.27MB
CMS Size 14.30MB
Click here for support information.
Used frequently
Last Used On 7/20/2006
To change this program or remove it from your computer, click Change or Remove.
Change
Remove
DRS Size 1,820.00MB
High Definition Audio Driver Package - KB888111
Kaspersky Anti-Virus Personal Size 10.25MB
Microsoft .NET Framework 1.1 Size 36.15MB
PowerSearch Size 2.38MB
REALTEK Gigabit and Fast Ethernet NIC Driver Size 1.93MB
SoundMAX Size 3.73MB
Windows Installer 3.1 (KB893803)

- Click the “Yes” button for the confirmation.



- Removing the CMS is completed after this step.



2. LOG IN & LOG OUT

2.1. Log in

The CMS logo is displayed when the program is started.

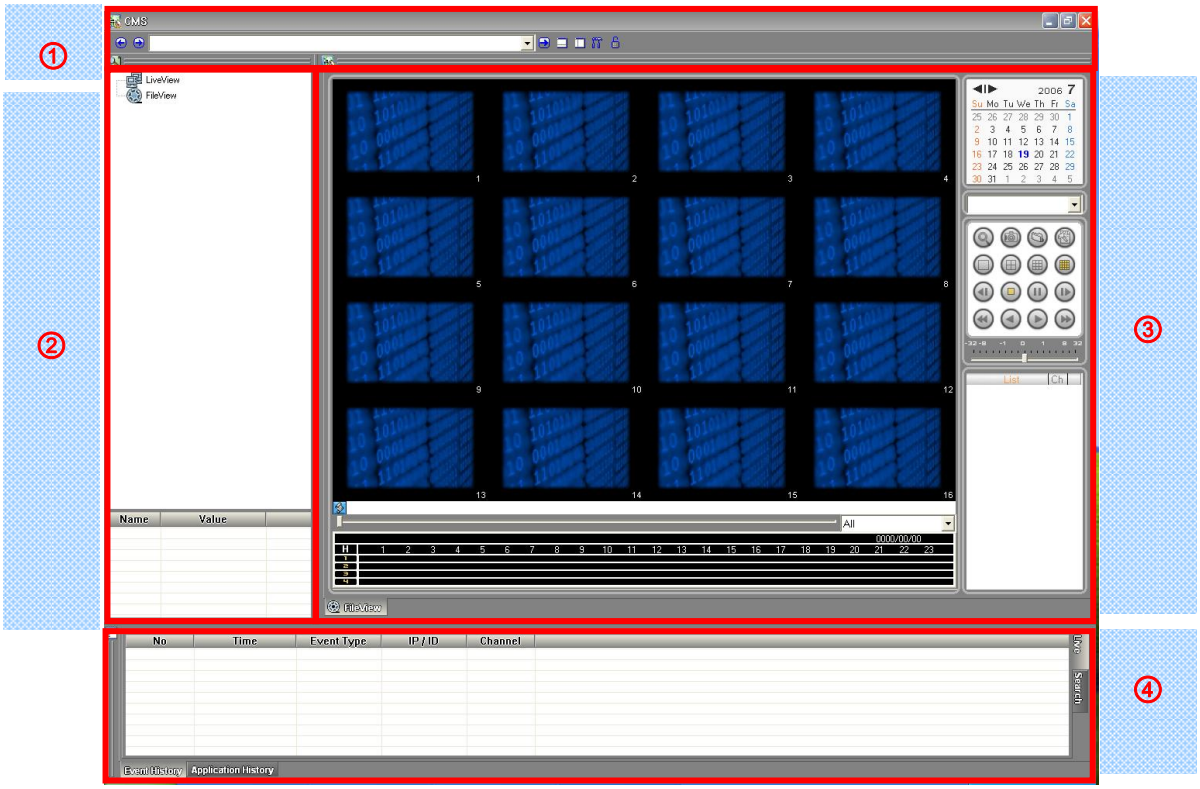
The initial password is created when you enter it. Keep it in a safe place for the future use. If you don't want a password, just click the "Cancel" button. **Note:** In order to make full use of the CMS software, a password is required.

The password should consist of at least 4 characters and no more than 16 characters. If you enter an incorrect number of characters for the password, you get an error dialog (see example above).

2.2. Log out

When closing the software, you are required to enter the password to log out.

2.3. Default Display mode (Initial Display)



- The Tool Bar is used for basic functions and for entering into setup mode. (Same as Windows interface)
- The Mode View window has a tree structured display and pop-up menu for setup.
- In the Main View window, LiveView, FileView, and Group panels are displayed.
- The History View window consists of event & application history for each panel in live and search mode.

3. TOOL BAR

When you move over each button with the mouse cursor, a tool tip message will be displayed.

CMS logo: If you do double-click the logo, the program will be closed.

From the left: Minimize, Restore down, and Close (same as Windows).

Previous/Next buttons (same as Windows).

This is a combo box which uses the same concept as the address bar on a web browser. If you enter a panel title and then press the “Enter” button or click the “GO” button, you can move directly to it.

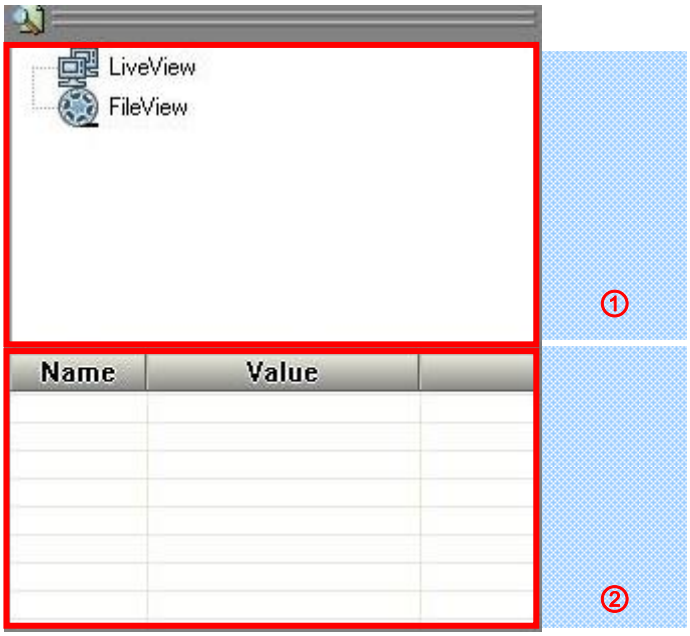
Display Mode: Left icon (Mode view window hidden)
Right icon (History view window hidden)

Environment Setup:General, recording schedule, alias setting

Edit mode: Edit items in the Mode View window.
To toggle the mode, you must enter the password.

4. MODE VIEW WINDOW

When going into the Mode View window, you must enter the password. In order to enter Mode View, the software must be in Edit Mode. To enter Edit Mode, click on the lock icon and then enter a valid password.

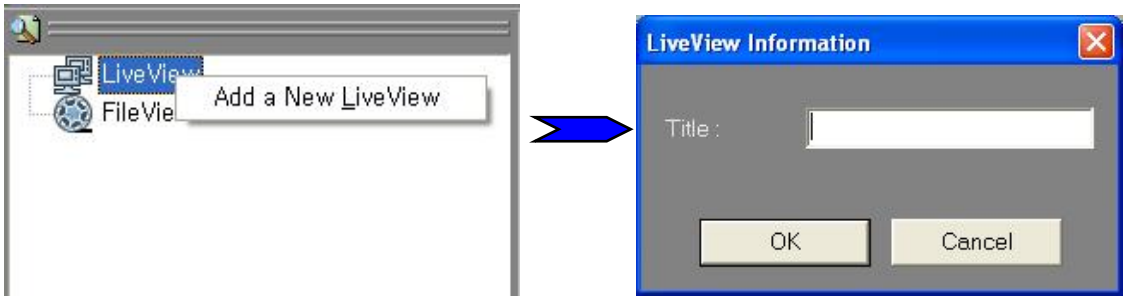


4.1. Explorer tree (①)

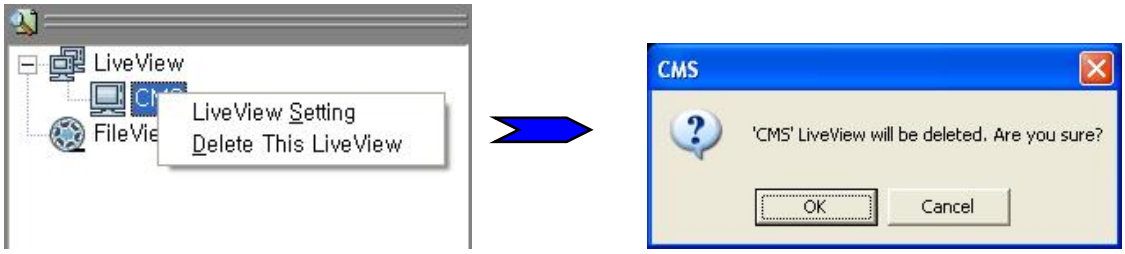
You need to follow the below procedures for setting each panel, camera, etc.

4.1.1. Add/Delete a New LiveView

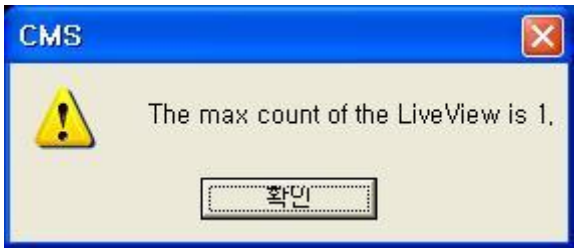
Right-Click the mouse button on the LiveView and enter a Title.



LiveView can be deleted after confirming through this message.

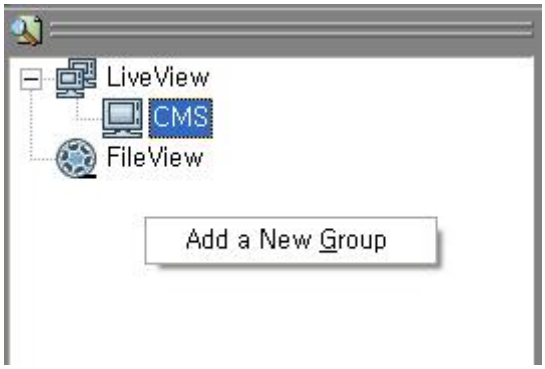


CMS is limited to a maximum of 16 channels. So, when you try to add another LiveView, the message box below is displayed.

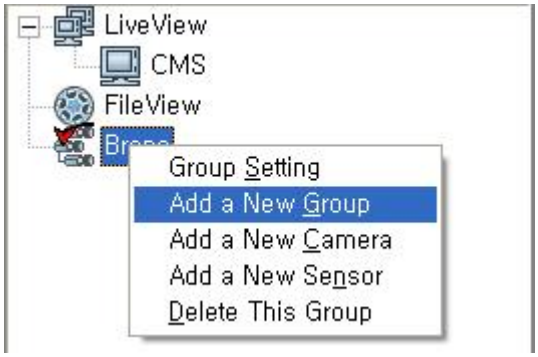


4.1.2. Add/Delete a New Group

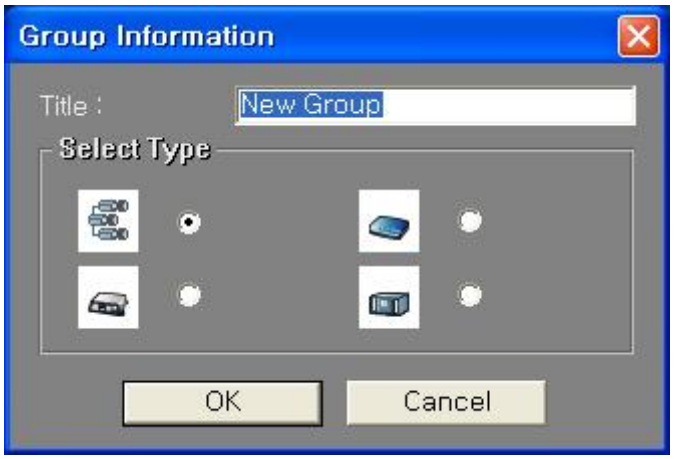
Right-click on a blank area and select “Add a New Group”.



When you want to add a sub-group to the main group, you can right-click on the group icon and select “Add a New Group”.

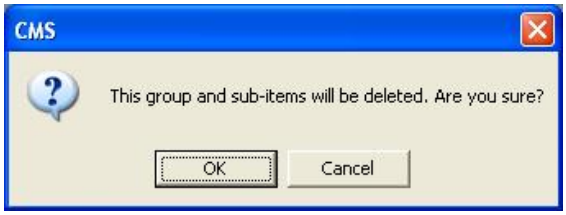


[Group Setting]



- Title: Maximum 20 characters
- Select a type of device such as IP Camera, video server, and DVR.
- Press “OK” button to apply it.

You can delete a group and sub items after confirming through this message. (Refer to 4.1.5)

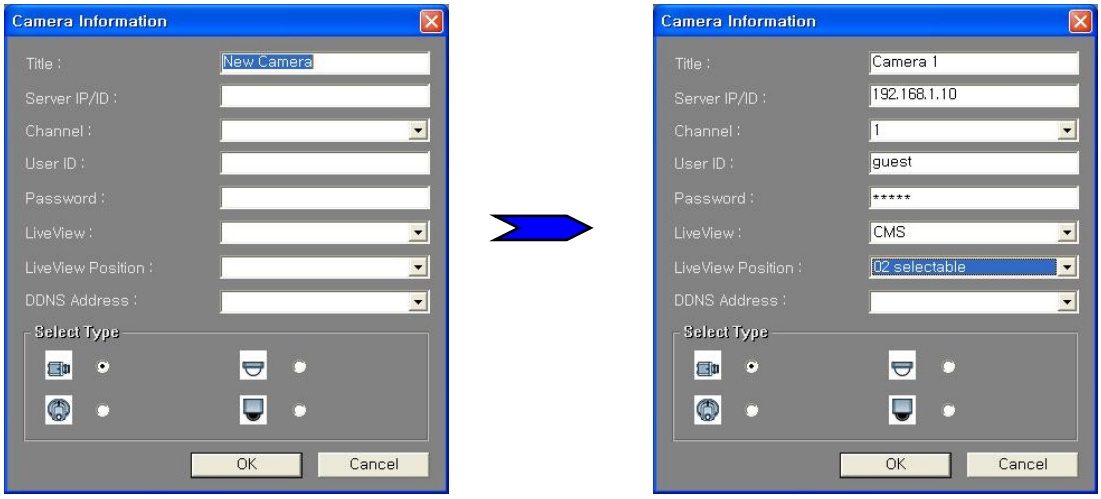


4.1.3. Add a New Camera or Sensor

You should add a new camera or sensor after making a LiveView panel.

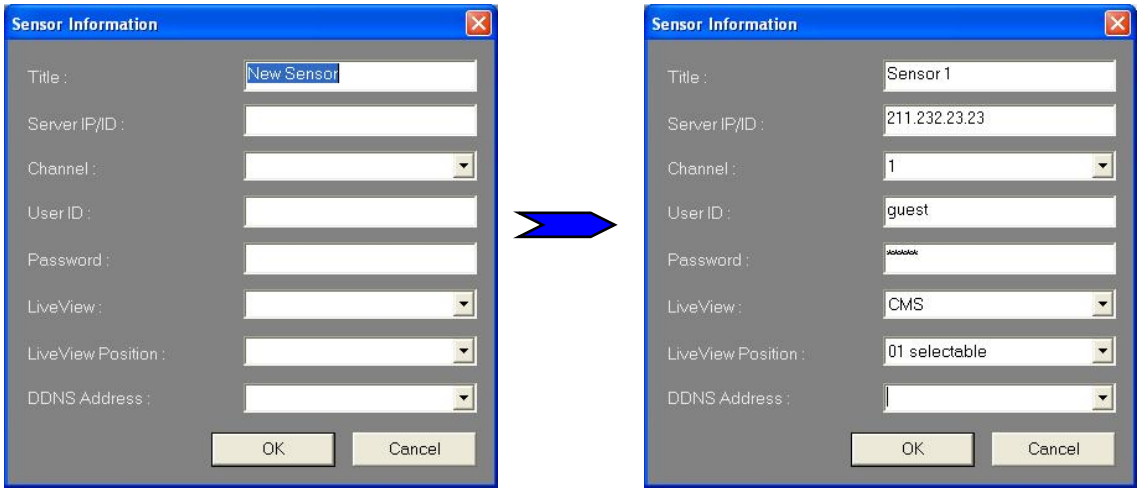
Right-click on the group:

[Camera Setting]



- Title: Maximum 20 characters
- Server IP/ID: IP address or ID of network video server
- Channel: Channel of network video server
- User ID & Password: ID & Password for access to network video server
- LiveView: You can select a LiveView title.
- LiveView Position: One LiveView has 16 channels. You can select one of them.
- DDNS Address: When you use a Dynamic IP and Domain Name, you need to enter the IP address of the DDNS.
- Camera type selection: There are four types of cameras such as Fixed, Mini dome, Mini PTZ, and Speed dome camera.

[Sensor Setting]



- Title: Maximum 20 characters
- Server IP/ID: IP address or ID of network video server connected with sensor
- Channel: Channel of network video server
- User ID & Password: ID & Password for access to network video server
- LiveView: You can select LiveView title.
- LiveView Position: One LiveView has 16 channels. You can select one of them.
- DDNS Address: When you use a Dynamic IP and Domain Name, you need to input the IP address of the DDNS.

4.1.4. Pop-up Menu

A pop-up menu will display when you right-click the mouse button.

<Group>

- Group Setting: You can change the group title.
- Add a New Group: Refer to the above 4.1.2 [Group Setting]
- Add a New Camera: Refer to the above 4.1.3 [Camera Setting]
- Add a New Sensor: Refer to the above 4.1.3 [Sensor Setting]
- Delete This Group: Refer to the above 4.1.2 [Group Setting]

<Camera >

- Camera Setting: You can change the camera title.
- Delete This Camera: You can delete this selected camera.
- Go To Group: You can go to Group panel directly.
- Go To LiveView: You can go to LiveView panel directly.
- Go To FileView: You can go to FileView panel directly.
- Go To Schedule: You can go to Schedule setup page directly.

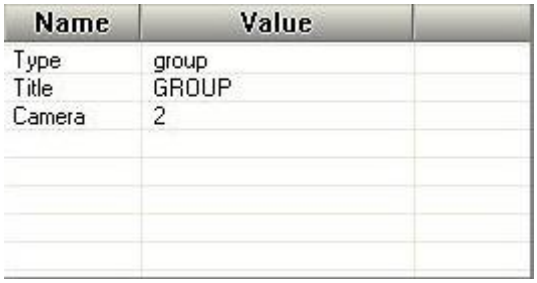
<Sensor >

- Sensor Setting: You can change sensor title.
- Delete This Sensor: You can delete this selected sensor.
- Go To Group: You can go to Group panel directly.
- Go To LiveView: You can go to LiveView panel directly.
- Go To FileView: You can go to FileView panel directly.
- Go To Schedule: You can go to Schedule setup page directly.

4.2. Property window (②)

This shows the status of group, camera or sensor.

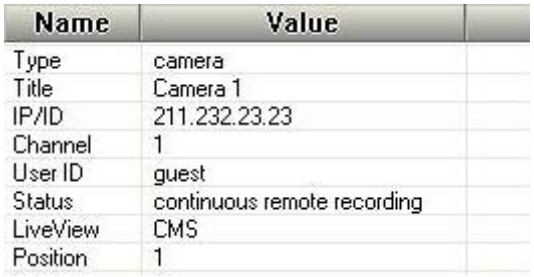
[Group]



Name	Value
Type	group
Title	GROUP
Camera	2

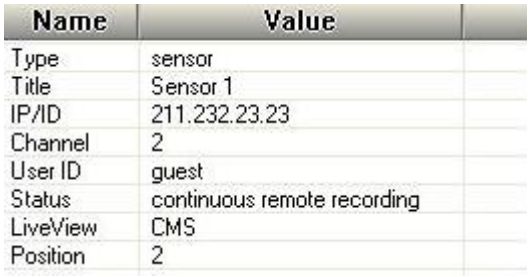
- Type: Class of the selected item
- Title: Name of the selected item
- Camera: The number of connected cameras

[Camera]



Name	Value
Type	camera
Title	Camera 1
IP/ID	211.232.23.23
Channel	1
User ID	guest
Status	continuous remote recording
LiveView	CMS
Position	1

[Sensor]



Name	Value
Type	sensor
Title	Sensor 1
IP/ID	211.232.23.23
Channel	2
User ID	guest
Status	continuous remote recording
LiveView	CMS
Position	2

- Type: Class of the selected item
- Title: Name of the selected item
- IP/ID: IP address or ID of connected video server
- Channel: Channel number of video server
- User ID: ID for access to video server
- Status: Normal, Live connecting, Live/Motion/Sensor/Continuous remote recording, Live local recording, Reconnecting, Net fail, or No signal
- LiveView: Connected LiveView panel
- Position: Displayed channel number

4.3. Icon Collections

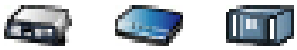
<LiveView>

LiveView group Added LiveView panel

<FileView>

<Group>

<Video transmitting devices>



<Camera>

<Sensor>

<Live connection>

<Local recording on CMS Server>

<Remote recording on Video transmitter>

<Channel selection >

5. MAIN VIEW WINDOW

5.1. Basic Function

- Undocking/Docking of LiveView & FileView
  - Undocking : Right mouse click on the tab label
  - Docking : Click button
- Type of panel : LiveView, FileView, Group

5.2. LiveView

[Display mode]

: 1 Division

: 4 Divisions

: 8 Divisions

: 16 Divisions

[Others]

: Refresh the live connection

: PTZ control panel (See details below)

: Live display configuration (See details below)

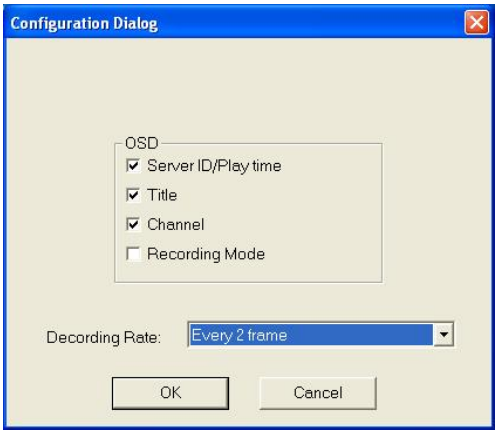
[Detail]

Pan/Tilt/Auto Pan

Auto Zoom/Focus

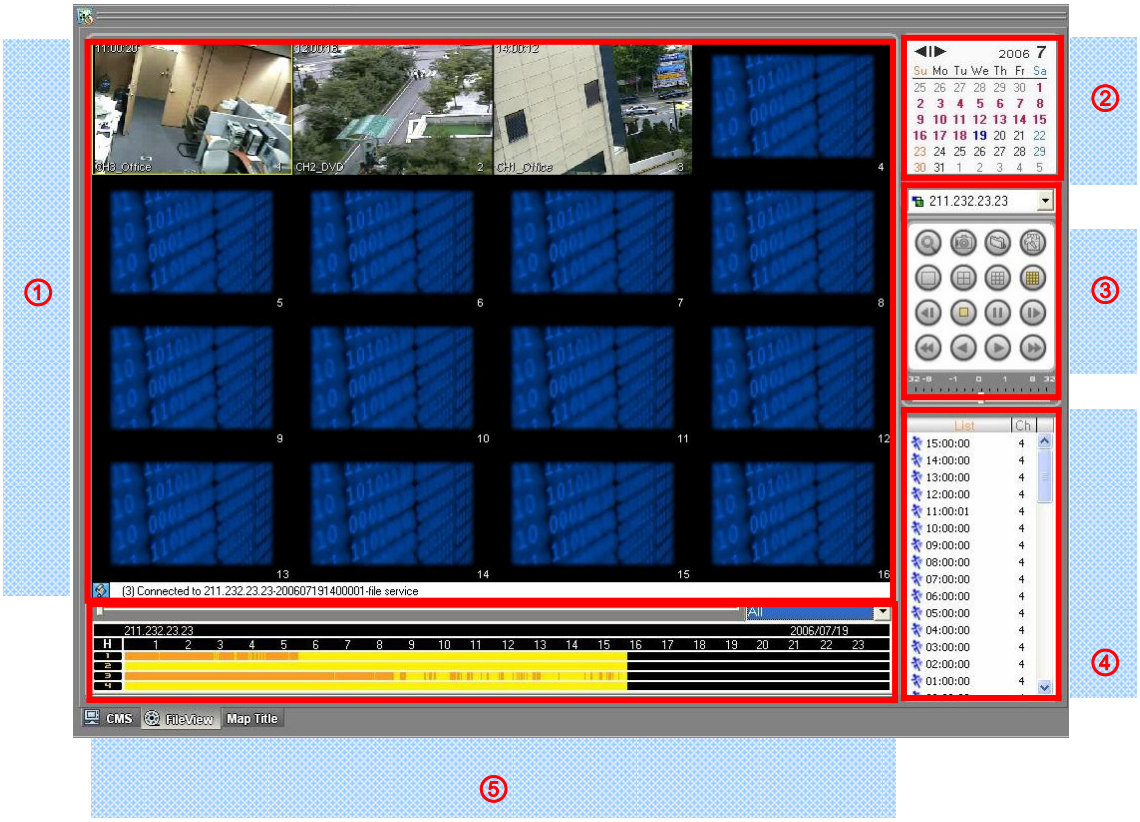
Preset/Aux control

Relay control/
Audio communication (Client ➔ Server): To be continued



- OSD: On Screen Display
- Decoding Rate: You can adjust the frame rate for live monitoring in consideration of network bandwidth.

5.3. FileView



5.3.1. Main screen (①)

- Division: Max. 16 divisions to playback for multiple sites and additional live monitoring

5.3.2. Calendar (②)

- **Grey**: No recordings on this date
- **Dark blue**: Searching date
- **Red**: Recordings on this date (Activated)

5.3.3. File playback panel (③)

- Different icons for remote and local recording

: Remote recording

: Local recording

- Playback control buttons

: Search for recorded data

: Capture a still image

: Open a recorded file

: Playback display configuration

: 1 / 4 / 8 / 16 Division

: 2 Frame backwards

: Stop

: Pause

: 2 Frame forwards

: 2 times slower play

: Backward play

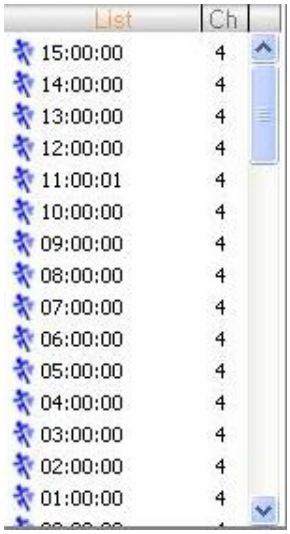
: Normal play

: 2 times faster play

- Playback speed control

Playback speed varies from -32 to 32 for each channel independently.

5.3.4. File list (④: 1st way to playback)



- One hour based file
- Remote recording mode: Live Network Fail Sensor No signal Motion Continuous
- Local recording mode: Continuous Motion Sensor
- List and channel can be sorted by clicking the title on the top.

5.3.5. Intelligent Time Map (⑤: 2nd way to playback)

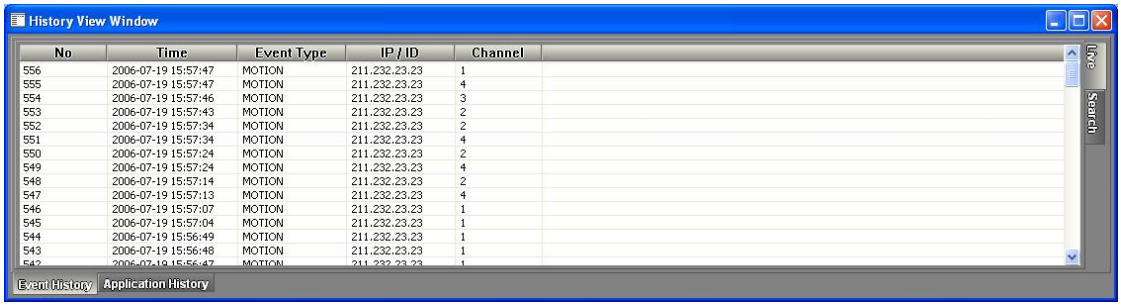
- It shows a different color in each recording mode.

- When selecting one of the recording modes, the following drop down list will appear.

- When you select the timeframe you want to see, right click to display a time map. This time map is in one hour increments.
- You can move the time scroll freely. The playback is linked with the movement of time scroll.
- When you click the channel number which is positioned on the left, the playback of selected channel will be deactivated.

6. HISTORY VIEW WINDOW

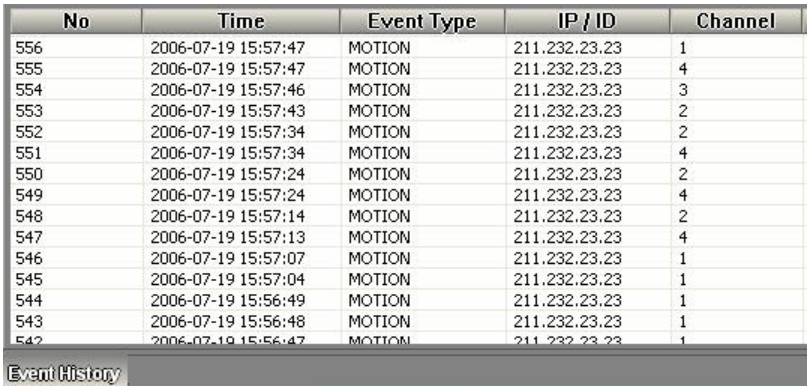
- Undocking/Docking of history/mode/main view window
  - Undocking: Left mouse click & drag each tool bar or Double click
  - Docking: Click minimize button



- History type: Event history, Application History
- Display mode: Text, Thumbnail

6.1. Event history (Live)

[Text]

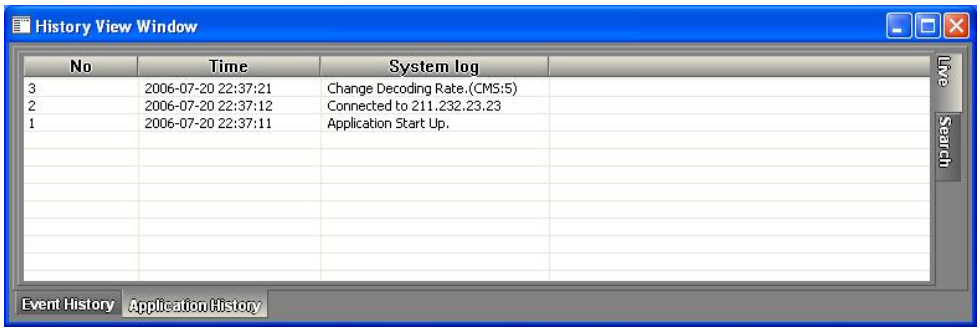


- Display information: Number of events, time (yy/mm/dd) and (h/m/s), event type (recording mode), server IP/ID, and server channel

[Thumbnail]

- Display information: Server IP/ID, server channel, time (yy/mm/dd, h/m/s)

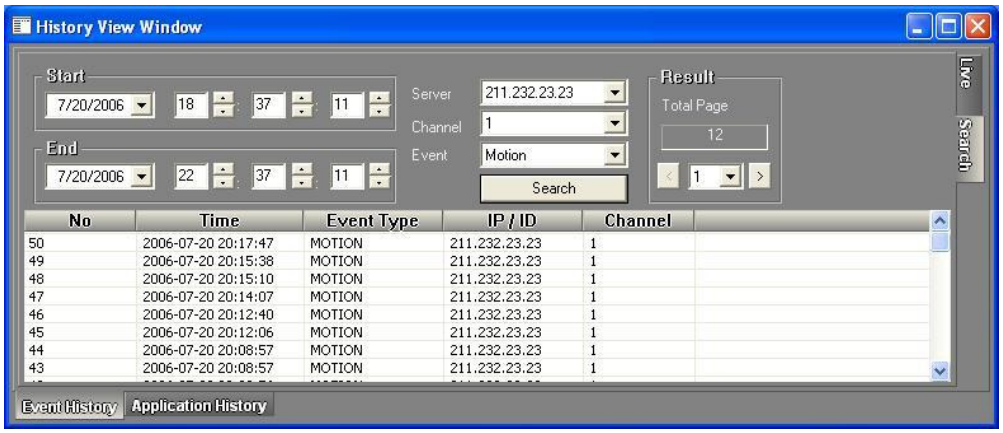
6.2. Application history (Live)



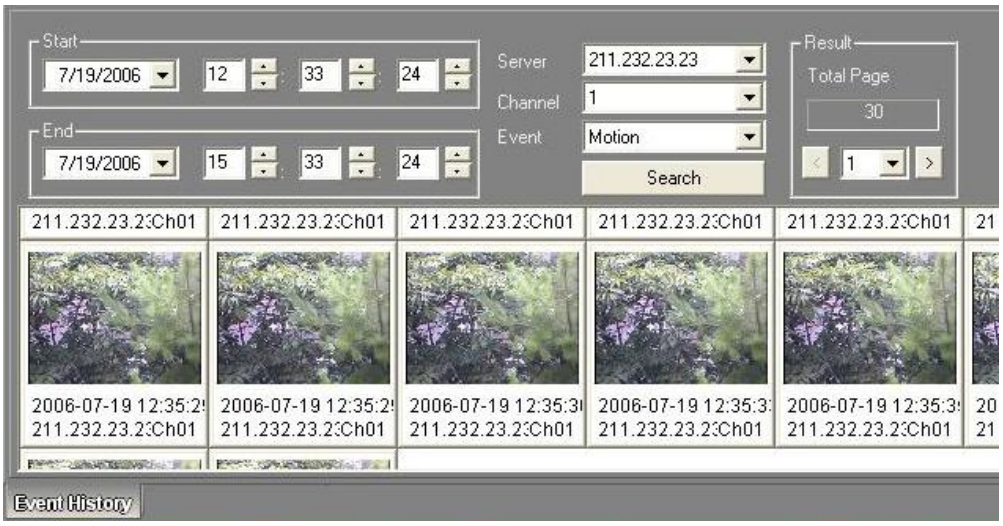
- Display information: No. of events, time (yy/mm/dd, h/m/s), system log

6.3. Event history (Search)

[Text]



[Thumbnail]



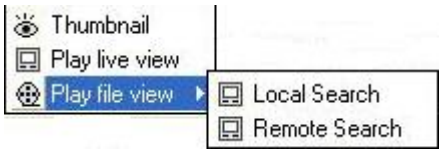
- Search condition: Duration time, server IP/ID, channel, event type
- Results show the total number of pages for the searched data

6.4. Application history (Search)

- Search condition: Duration time, event type
- Result shows the total pages for the searched data.
- The log data is stored in the local PC. (C:\Program Files\CMS\Data*.sys)

Note: Event image files are deleted when the synchronized recording data is deleted. Therefore, in consideration of the size of system drive, we recommend that you use "No Event Capture" as a default. (Refer to the following 7.1.2)

6.5. Pop-up menu for Event history (Live & Search)



- Thumbnail/Text: It converts text into thumbnails and vice-versa.
- Play live view

  If you click "Play live view" after selecting an event item (text or image), the related group panel is activated automatically. To apply this feature, group panel should be displayed in the main view window.

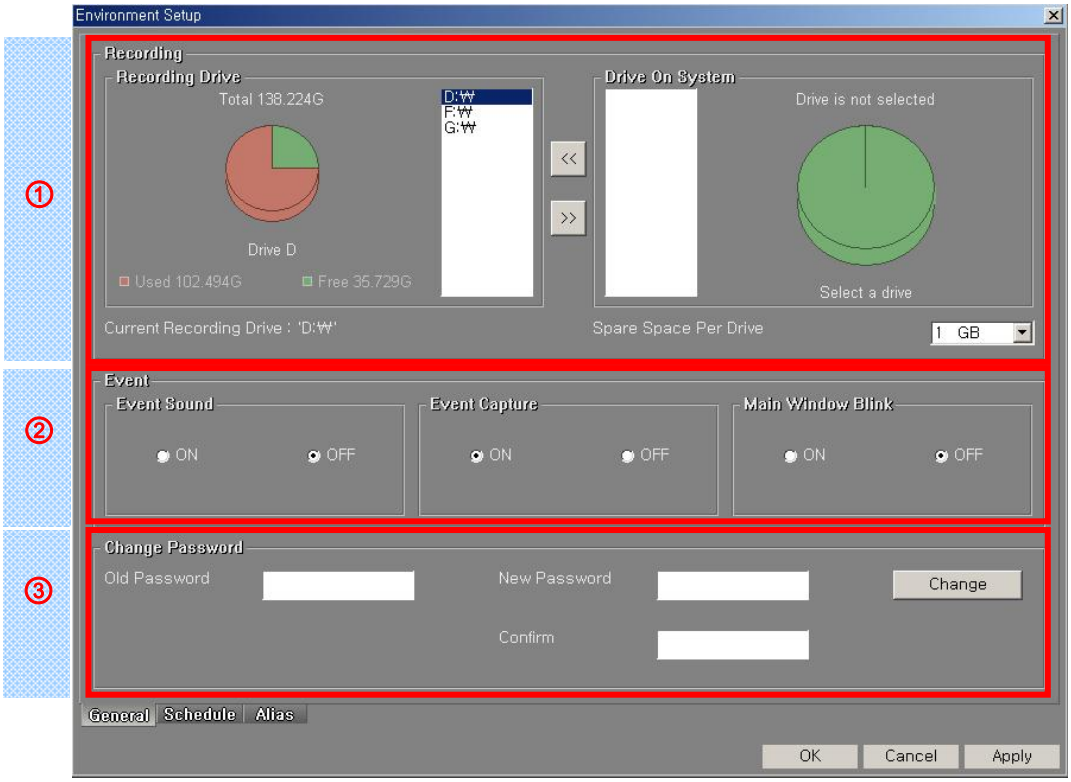
  (In Live mode, double clicking on the item gives you the same operation)
- Play file view

  If you click "Local/Remote Search" after selecting an event item (text or image), the related file is played back from the event occurring on the FileView automatically. To apply this feature, the FileView panel should be displayed in the main view window.

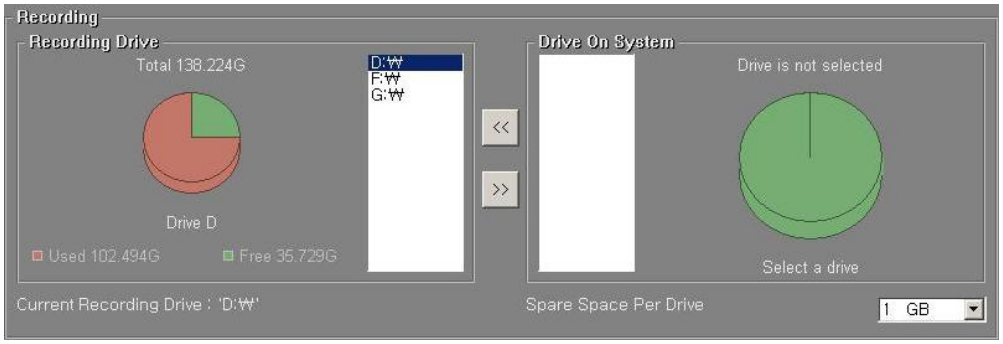
  (In Search mode, double clicking on the item gives you the same operation)

7. RECORDING SETUP

7.1. General setting



7.1.1. Recording drive setup (①)



- Recording drive: This is the drive setting for operating the recording, the left section is for the recording drive and the right one is for the system drive.

- You can edit the drive settings by using the << >> buttons.

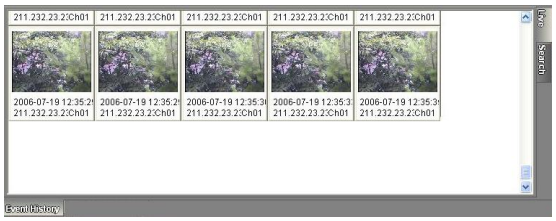
(Note: The drive which the Windows OS is installed on should not be used as a recording drive for the stability of the system.)

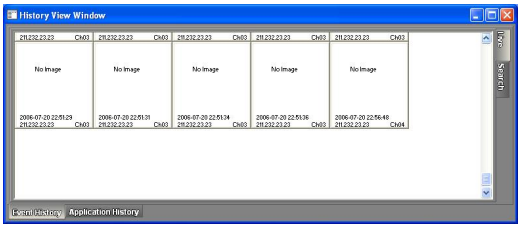
- Used and Free disk space is graphically displayed.
- We recommend that you leave at least 5GB of free space on each drive for the stability of the system.

7.1.2. Event setup (②)

- Event Sound: If you set Event Sound to on, an alarm sounds when events take place to inform you of the occurrence.
- Event Capture On generates event data with snapshot images in event history. Event Capture Off generates only event date with blank images.
- Main Window Blink: If you set it on, you can have the CMS tab blink when events take place. This is a simple way to notify you when events occur.
- After all settings have been entered, apply the changes by pressing the “OK” or “Apply” button.

[Comparison between event capture on and off]

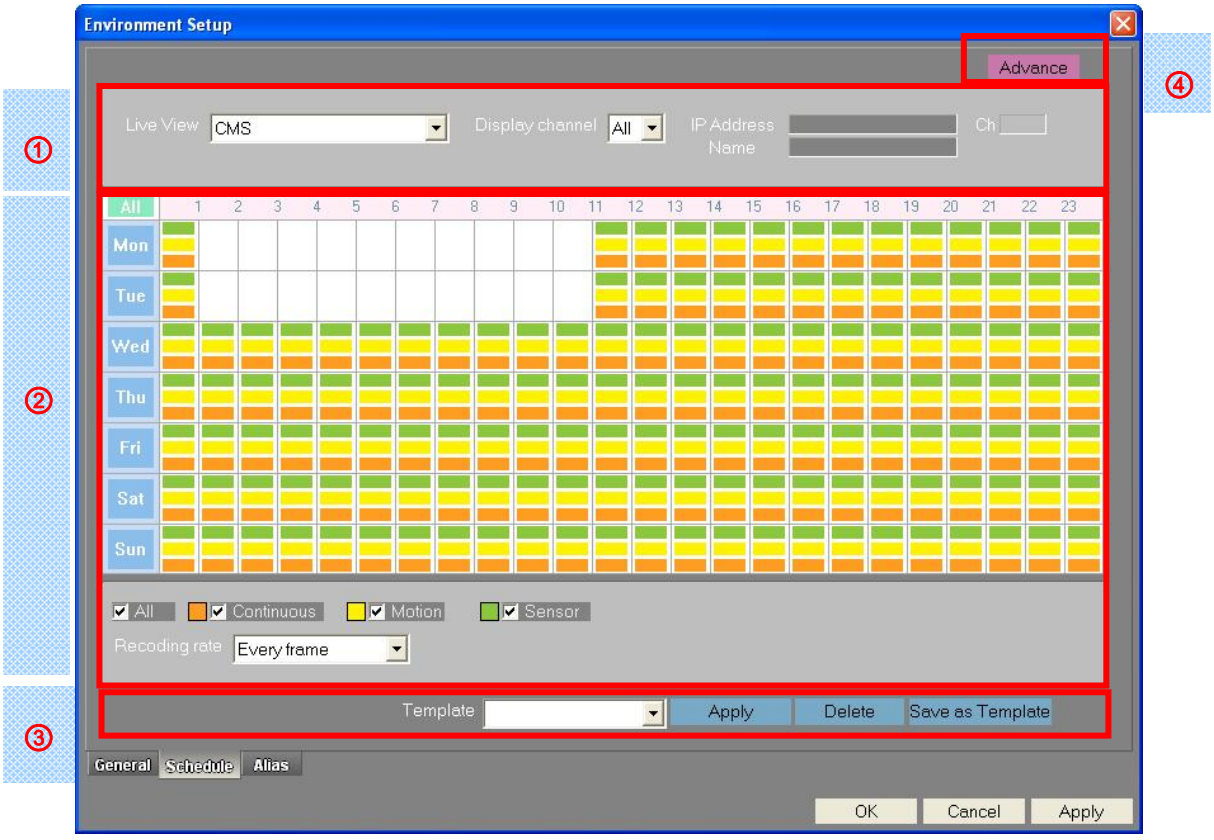




7.1.3. Password setup (③)

- You need to know the password that was previously entered to change it.
- After changing it, you should click the “Change” button to apply it.

7.2. Schedule setting



7.2.1. Connection information (①)

- LiveView: You can select one of the LiveView titles.
- Display channel
  - Select a channel from the list. The connected channel is shown. You can apply the recording schedule to each channel.
  - When you click the channel, the channel information (IP address, Name, channel number) is displayed on the right box.
- All: If you want to apply a recording schedule to “All” channels, you should select “All” from the “Display channel” list.

7.2.2. Recording schedule (②)

- Recording mode: Continuous, Motion, and Sensor
- Recording rate: You can set recording frame rate.
- Daily & Weekly schedule in 24 hours

- Add/Delete recording schedule
  - Check required recording mode
  - Click and drag (left/right mouse button) to add/delete the recording mode (In case of deletion, eraser mark is shown)
- All: You can apply the chosen recording modes to all dates and times with one mouse click.

7.2.3. Template setup (③)

For future modifications or additional settings, you can create your own templates.

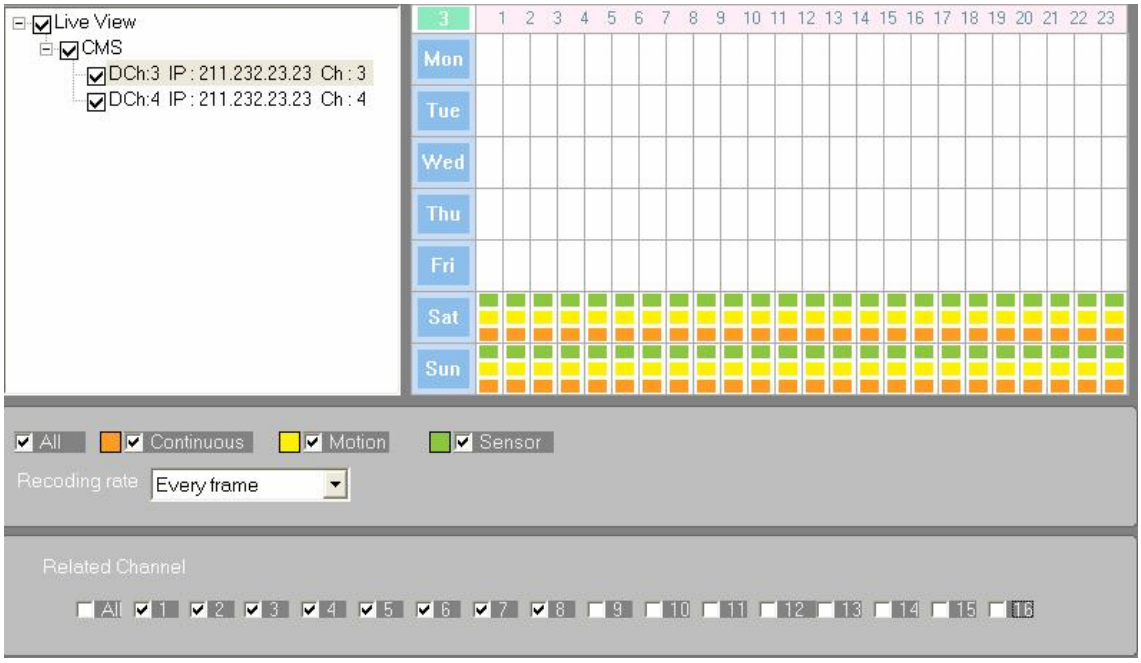
- Finish recording schedule settings in the table
- Click

- Input template name

- When needed, you can load a pre-defined template and click

.

7.2.4. Advanced setup (④)



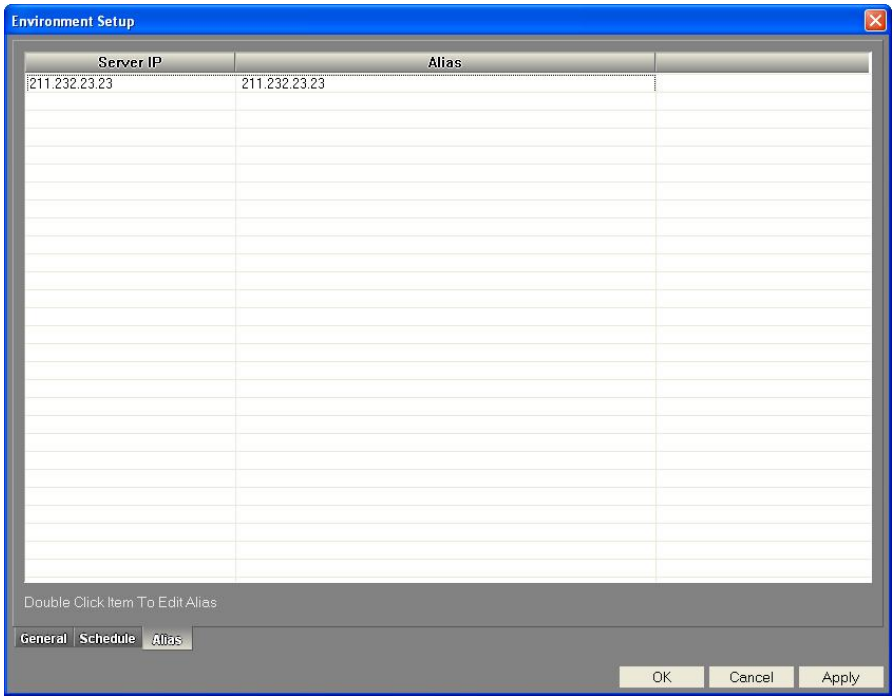
- Tree structured channel display:
  - Each channel can be marked separately and upper level LiveView can cover the lower level one with one mouse click.
  - In case different channels are required for the same schedule, you can mark and apply the same settings to them with one mouse click.
- Recording schedule : Refer to 7.2.2
- Related channel : This is for event cooperation with a specified channel

  If you mark some related channels after you select a channel in the tree structure, when events occur on the specified channel, other related channels will activate the same event and signal.

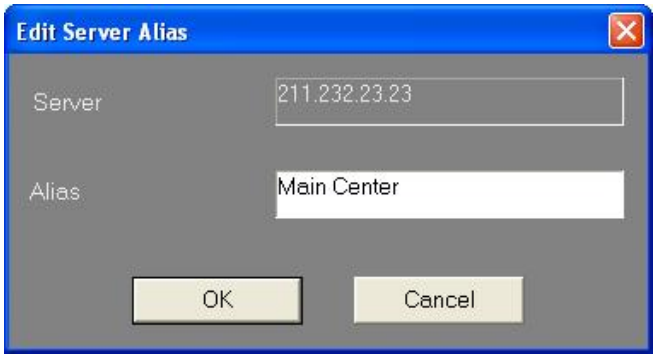
7.3. Alias setting

The Alias function gives a specific nickname to an IP address so that you can distinguish each camera.

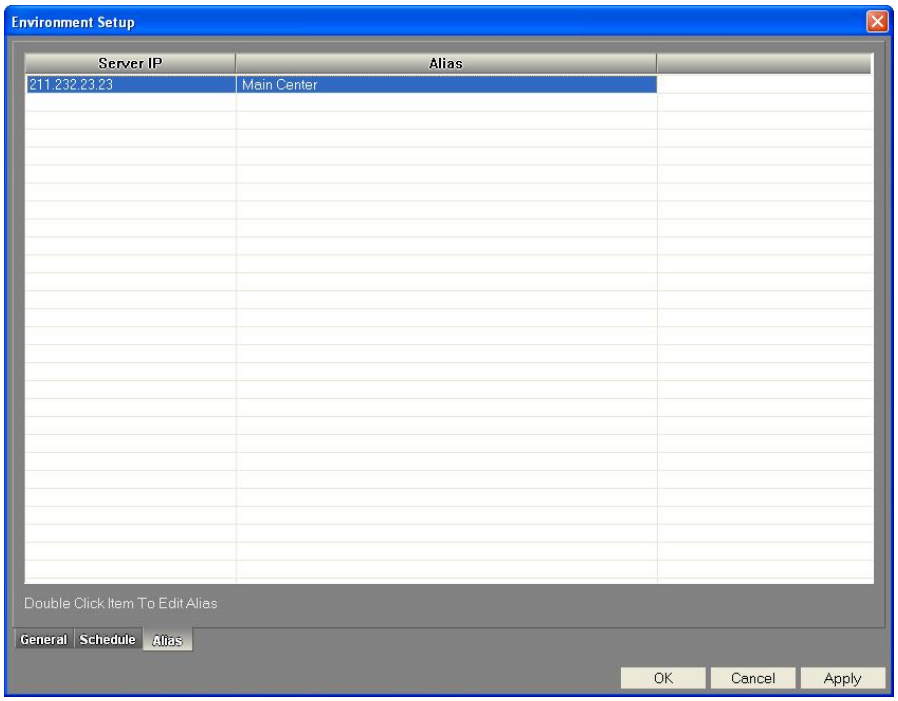
- Double-click “Item” to edit alias.



- Input the Alias in the message box.
  (Ensure that the IP address of server matches)



- The aliases are listed in the window.

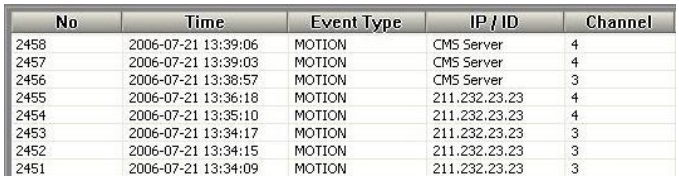


◈ Alias effect

When you create an alias, the alias name is displayed in every panel.

[For example]

: Server search in FileView



No	Time	Event Type	IP / ID	Channel
2458	2006-07-21 13:39:06	MOTION	CMS Server	4
2457	2006-07-21 13:39:03	MOTION	CMS Server	4
2456	2006-07-21 13:38:57	MOTION	CMS Server	3
2455	2006-07-21 13:36:18	MOTION	211.232.23.23	4
2454	2006-07-21 13:35:10	MOTION	211.232.23.23	4
2453	2006-07-21 13:34:17	MOTION	211.232.23.23	3
2452	2006-07-21 13:34:15	MOTION	211.232.23.23	3
2451	2006-07-21 13:34:09	MOTION	211.232.23.23	3

: Event list in history window

Notes